

What is claimed:

Claim 1

A porous nano material polymer composite wherein polymer penetrates into nano pores of nano silica to form network structure.

Claim 2

The porous nano material polymer composite according to claim 1, wherein the polymer is polymethyl methacrylate (PMMA).

Claim 3

A manufacturing method of porous nano material polymer composite, the method comprising, impregnating monomer in nanometer order holes of a porous nano material in supercritical carbon dioxide fluid, and polymerizing the monomer.